CLASSIFICATION AND CORRELATION

OF

THE SOILS OF

BENTON COUNTY
INDIANA

APRIL 1985

LOCATION

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
MIDWEST NATIONAL TECHNICAL CENTER
LINCOLN, NEBRASKA

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS - ADS - 30
Rev. 2 - 81

MEMORANDUM OF TELEPHONE CONVERSATION

SUBJECT: Benton Co Correlation Document

DATE: 5-2-85

FROM: Bill Hostetler

LOCATION:

TO: Dick Base

LOCATION:

Information given:

Following corrections are needed in the document

P 7 Tippecanoe County is on the east not the south

P 8
BaA goes to VaB2 rather than remains as

P 9
MoB2 should be changed to MbB2

P 9 SyA goes to BbA rather than remains

P 10 MoB2 should be changed to MbB2

Symbols Legend sheet
drained should be added to correlation note for the wet spot ✱ symbol

012 where drained should be added to the EIA unit on the prime farmland list

016 Selma till substratum (substratum misspelled)

Reply or commitment(s) made:

Dick does not think an addendum is needed

Make sure the computerfile is changed for the Elliott. (It is OK)

I will note these changes in our copies in the S/O of OK

Bill H

Discussed with Ray
6-2-85
OK

No need to make addendum of Dot Base
Does Dwood

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
Midwest National Technical Center
Lincoln, Nebraska 68508-3866

Classification and Correlation of the Soils of Benton County, Indiana

The final correlation conference for the Benton County Soil Survey was held in Lincoln, Nebraska, October 29 to November 2, 1984. Those participating were James R. Barnes, party leader; William Hosteter, soil specialist; and Steve Base, soil correlator. The data reviewed consisted of the first draft of the manuscript, correlation samples, field sheets, field notes, laboratory data, and the field correlation. Steve Base attended the comprehensive field review the week of November 2, 1981.

Headnote for Detailed Soil Survey Legend:

Map symbols consist of a combination of letters or of letters and numbers. The first capital letter is the initial one of the map unit name. The lowercase letter that follows separate map units having names that begin with the same letter, except that it does not separate sloping or eroded phases. The second capital letter indicates the class of slope. Symbols without a slope letter are for nearly level soils or miscellaneous areas. A final number of 2 indicates that the soil is moderately eroded and a number 3 indicates that the soil is severely eroded.

SOIL CORRELATION OF
BENTON COUNTY, INDIANA

Field symbols	Field map unit name	Publication symbol	Approved map unit name
AnA	Andres silt loam, 0 to 2 percent slopes	AnA	Andres silt loam, 0 to 2 percent slopes
AnB, AnB2	Andres silt loam, 2 to 4 percent slopes	AnB	Andres silt loam, 2 to 4 percent slopes
As	Ashkum silty clay loam	As	Ashkum silty clay loam
AyB2, AyA, AyB	Ayr Variant fine sandy loam, 2 to 6 percent slopes, eroded	AyB2	Ayr Variant fine sandy loam, 2 to 6 percent slopes, eroded
BaB2, SyB, SyB2, BaB	Barce loam, 2 to 6 percent slopes, eroded	BaB2	Barce loam, 2 to 6 percent slopes, eroded
BaC2, SyC2	Barce loam, 6 to 12 percent slopes, eroded	BaC2	Barce loam, 6 to 12 percent slopes, eroded
BaA, SyA	Barce silt loam, 0 to 2 percent slopes	BbA	Barce silt loam, 0 to 2 percent slopes
OnB2, OnA, OnB	Onarga Variant loam, 2 to 6 percent slopes, eroded	BdB2	Billett sandy loam, 2 to 6 percent slopes, eroded
OnC2, JaC2, OnC, OcC2, WhC2	Onarga Variant loam, 6 to 12 percent slopes, eroded	BeC2	Billett loam, 6 to 12 percent slopes, eroded
BmA	Brems Variant fine sandy loam, 0 to 3 percent slopes	BmA	Brems Variant fine sandy loam, 0 to 3 percent slopes
Bt	Bryce silty clay	Bt	Bryce silty clay
Ch, Mo	Chalmers silty clay loam	Ch	Chalmers silty clay loam

BENTON COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
Co	Comfrey silty clay loam, sandy substratum, occasionally flooded	Ck	Comfrey silty clay loam, sandy substratum, occasionally flooded
Cn, So	Comfrey silty clay loam, sandy substratum, frequently flooded	Cm	Comfrey silty clay loam, sandy substratum, frequently flooded
CpA, CpB, CpB2	Conover silt loam, 0 to 3 percent slopes	CpA	Conover silt loam, 0 to 3 percent slopes
CsA	Corwin silt loam, 0 to 2 percent slopes	CsA	Corwin silt loam, 0 to 2 percent slopes
CsB2, DnB2, DnB, CsB, SbB2	Corwin silt loam, 2 to 6 percent slopes, eroded	CsB2	Corwin silt loam, 2 to 6 percent slopes, eroded
CsC2, OdC2, PdC2	Corwin silt loam, 6 to 12 percent slopes, eroded	CsC2	Corwin silt loam, 6 to 12 percent slopes, eroded
Ct, Sn	Crane silt loam	Ct	Crane silt loam
Cu	Crane loam, till substratum	Cu	Crane loam, till substratum
Do, BnA, MxA, FoA	Darroch silt loam	Do	Darroch silt loam
Do, RbA, RbB, RbB2, FpA	Darroch silt loam, till subtratum	Dp	Darroch silt loam, till substratum
Dr	Darroch silt loam, till substratum	Dr	Darroch silt loam, moderately fine substratum
Mn	Milford silt loam	Du	Drummer silty clay loam
Mp	Drummer silty clay loam, gravelly substratum	Dv	Drummer silty clay loam, gravelly substratum

BENTON COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
Pk	Drummer silty clay loam, sandy substratum	Dx	Drummer silty clay loam, stratified sandy substratum
ElA	Elliott silt loam, 0 to 2 percent slopes	ElA	Elliott silt loam, 0 to 2 percent slopes
ElB2, ElB	Elliott silt loam, 2 to 4 percent slopes, eroded	ElB2	Elliott silt loam, 2 to 4 percent slopes, eroded
FoB2, FoB, PrB	Foresman silt loam, 1 to 5 percent slopes, eroded	FoB2	Foresman silt loam, 1 to 5 percent slopes, eroded
FpB2, FpB, TmA, TmB	Foresman silt loam, till substratum, 1 to 5 percent slopes, eroded	FpB2	Foresman silt loam, till substratum, 1 to 5 percent slopes, eroded
FrB2	Foresman loam, till substratum, 1 to 5 percent slopes, eroded	FrB2	Foresman loam, moderately fine substratum, 1 to 5 percent slopes, eroded
Wm	Free clay loam	Ft	Free clay loam
GlA	Gilboa silt loam, 0 to 2 percent slopes	GlA	Gilboa silt loam, 0 to 2 percent slopes
GlB, GlB2	Gilboa silt loam, 2 to 4 percent slopes	GlB	Gilboa silt loam, 2 to 4 percent slopes
Ho, Ed, Pa	Houghton muck	Ho	Houghton muck
LsA	Lisbon silt loam, 0 to 2 percent slopes	LsA	Lisbon silt loam, 0 to 2 percent slopes
MbB2	Markham silt loam, 2 to 6 percent slopes, eroded	MbB2	Markham silt loam, 2 to 6 percent slopes, eroded
MlB2, MmB2, RsB, RsB2	Miami silt loam, 2 to 6 percent slopes, eroded	MlB2	Miami silt loam, 2 to 6 percent slopes, eroded

BENTON COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
MlD2, MmD3, MmD2	Miami silt loam, 12 to 20 percent slopes, eroded	MlD2	Miami silt loam, 12 to 20 percent slopes, eroded
MmC3, MmC2, RsC, RsC2	Miami clay loam, 6 to 12 percent slopes, severely eroded	MmC3	Miami clay loam, 6 to 12 percent slopes, severely eroded
WsB3, WsB2	Williamstown loam, 2 to 6 percent slopes, severely eroded	MuB3	Montmorenci loam, 2 to 6 percent slopes, severely eroded
MuB2, MuA, MuB	Montmorenci silt loam, 2 to 6 percent slopes, eroded	MxB2	Montmorenci silt loam, 2 to 6 percent slopes, eroded
OlA	Odell silt loam, 0 to 2 percent slopes	OlA	Odell silt loam, 0 to 2 percent slopes
OlB2, OlB	Odell silt loam, 2 to 4 percent slopes, eroded	OlB2	Odell silt loam, 2 to 4 percent slopes, eroded
Pn, Pf, We	Peotone silty clay loam, undrained	Pn	Peotone silty clay loam, undrained
Pt	Pits, gravel	Pt	Pits, gravel
OcA	Rush silt loam, 0 to 2 percent slopes	RuA	Rush silt loam, 0 to 2 percent slopes
OcB2	Rush silt loam, 2 to 6 percent slopes, eroded	RuB2	Rush silt loam, 2 to 6 percent slopes, eroded
Sd, AkA	Seafield fine sandy loam	Sd	Seafield fine sandy loam
Sh, Wn, Sg, Rd, Pm	Selma silt loam, till substratum	Sh	Selma silty clay loam, till substratum
Sk	Selma silty clay loam, till substratum	Sk	Selma silty clay loam, moderately fine substratum

BENTON COUNTY, INDIANA --Continued

Field symbols	Field map unit name	Publication symbol	Approved map unit name
SxA, MrA	Swygert silty clay loam, 0 to 2 percent slopes	SxA	Swygert silty clay loam, 0 to 2 percent slopes
SxB2, ClB2	Swygert silty clay loam, 2 to 6 percent slopes, eroded	SxB2	Swygert silty clay loam, 2 to 6 percent slopes, eroded
TlA, ThA	Tippecanoe silt loam, 0 to 2 percent slopes	TlA	Tippecanoe silt loam, 0 to 2 percent slopes
TlB, TlB2	Tippecanoe silt loam, 2 to 4 percent slopes	TlB	Tippecanoe silt loam, 2 to 4 percent slopes
VaB2	Varna silt loam, 1 to 6 percent slopes, eroded	VaB2	Varna silt loam, 1 to 5 percent slopes, eroded
Wa	Wallkill silt loam	Wa	Wallkill Variant silty clay loam
Wb	Warners Variant silty clay, till substratum, undrained	Wb	Warners Variant silty clay, undrained
WhA	Wea silt loam, 0 to 2 percent slopes	WhA	Wea silt loam, 0 to 2 percent slopes
WhB2, WhB	Wea silt loam, 2 to 6 percent slopes, eroded	WhB2	Wea silt loam, 2 to 6 percent slopes, eroded
WoA, WoB, WoB2	Whitaker silt loam, 0 to 3 percent slopes	WoA	Whitaker silt loam, 0 to 3 percent slopes
Wt	Wolcott loam	Wt	Wolcott loam

Series Established by this Correlation:

Barce (type location in Benton County, Indiana)
Free (type location in Benton County, Indiana)
Gilboa (type location in Benton County, Indiana)

Series Dropped or Made Inactive:

Judyville (dropped)

Certification Statement:
The state soil scientist certifies that:

1. Mapping was completed December 1983.

2. The general soil map for general planning has been joined with Newton County (Soil Survey in progress) and Jasper County (mapping completed but not correlated) on the north; White County (correlated in 1978) and Tippecanoe County (Soil Survey in progress) on the ~~south~~ east; Iroquois County, Illinois (correlated in 1982) on the west, and Warren County (in progress) on the south. A detailed join statement is on record. The detailed maps have been joined with adjoining counties. A detailed join statement is on record.

3. Interpretations have been coordinated.

4. The location of the typical pedons in this county are in soil areas using that reference name.

Verification of Exact Cooperator Names:
The following will be on the front of the publication:

United States Department of Agriculture
Soil Conservation Service
In cooperation with
Purdue University
Agricultural Experiment Station and
Indiana Department of Natural Resources
Soil and Water Conservation Committee

The citation in the box on the inside of the front cover will read:

"This survey was made cooperatively by the Soil Conservation Service, Purdue University Agricultural Experiment Station, and the Indiana Department of Natural Resources, Soil and Water Conservation Committee. It is part of the technical assistance furnished to the Benton County Soil and Water Conservation District. Financial assistance was made available by the Benton County Board of County Commissioners."

Disposition of Field Sheets:
The original atlas field sheets for Benton County will be retained by the Indiana State Office, and will be used in the map finishing procedures. Copies have been made for fire protection purposes. The state office at Indianapolis will prepare the atlas sheets for publication by September 1985.

Prior Soil Survey Publications:
The first soil survey of Benton County was made in 1917 (ref. citation). This survey updates the first survey and provides additional information and larger maps that show the soil in greater detail.

Soil Survey of Benton County, Indiana, Grove B. Jones, U.S. Department of Agriculture, in charge and J. Bayard Brill, Indiana Department of Geology. 22 pp., illus., 1917.

Instructions for Map Compilation and Map Finishing:
The conventional and special symbols used in this survey are listed on the attached SCS-SOI-37A. These are the only symbols that will be shown on the published maps. The maps will be finished using the "Guide for Soil Map Finishing", July 1976. Also see special instructions for Benton County issued by the Indiana state office.

In Benton County there are 2 groups of glacial till soils. One group consists of soils with silty clay loam till and the other consists of soils with loam till. Map unit symbols have been set up to cover all the soils with the 2 different textures. However, during the course of the field mapping some symbols were used in both groups. That is, a SyB2 (Symerton soil) symbol for example, was used in the silty clay loam area and also in the loam area. In doing the map finishing these situations need to be adjusted.

The party leader has taken clear acetate overlays and in red pencil has outlined involved map sheets as to the different areas of glacial till. The silty clay loam till area was referred to as "heavy till" and the loam till area was referred to as "light till". The Atlas Sheets numbers are 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 19, 20, 21, 22, and 28. These are the **only sheets with both** groups of till. All the rest of the Atlas Sheets will be in the loam (light) **glacial till area.**

An explanation of each situation in the county is as follows:

Field Symbol	
AnA	In the "heavy till" area it remains as AnA. In the "light till" area it goes to GlA.
AnB, AnB2	In the "heavy till" area they go to AnB. In the "light till" area ~~it~~ go to GlB.
As	In the "heavy till" area it remains as As. In the "light till" area it goes to Ch.
BaA	In the "heavy till" area it ~~remains~~ goes to as VaB2. In the "light till" area it goes to BbA.
BaB, BaB2	In the "heavy till" area they go to VaB2. In the "light till" area they go to BaB2.
Ch, Mo	In the "heavy till" area they go to As. In the "light till" area they go to Ch.

Field Symbol	
CsA	In the "heavy till" area it goes to VaB2. In the "light till" area it remains as CsA.
CsB, CsB2	In the "heavy till" area they go to VaB2. In the "light till" area they go to CsB2.
Dp	In the "heavy till" area it goes to Dr. In the "light till" area it remains as Dp.
Dr	In the "heavy till" area it remains as Dr. In the "light till" area it goes to Dp.
E1A	In the "heavy till" area it remains as E1A. In the "light till" area it goes to O1A.
E1B, E1B2	In the "heavy till" area they go to E1B2. In the "light till" area they go to O1B2.
FpB, FpB2	In the "heavy till" area they go to FrB2. In the "light till" area they go to FpB2.
FrB2	In the "heavy till" area it remains as FrB2. In the "light till" area it goes to FpB2.
G1A	In the "heavy till" area it goes to AnA. In the "light till" area it remains as G1A.
G1B, G1B2	In the "heavy till" area they go to AnB. In the "light till" area they go to G1B.
MbB2	In the "heavy till" area it remains as MbB2. In the "light till" area it goes to MxB2.
MuA, MuB, MuB2	In the "heavy till" area they go to MbB2. In the "light till" area they go to MxB2.
O1A	In the "heavy till" area it goes to E1A. In the "light till" area it remains as O1A.
O1B, O1B2	In the "heavy till" area they go to E1B2. In the "light till" area they go to O1B2.
Sh, Wn, Sg	In the "heavy till" area they go to Sk. In the "light till" area they go to Sh.
Sk	In the "heavy till" area it remains as Sk. In the "light till" area it goes to Sh.
SyA	In the "heavy till" area it goes to VaB2. In the "light till" area it ~~remains~~ goes to as BbA.

Field Symbol	
SyB, SyB2	In the "heavy till" area they go to VaB2. In the "light till" area they go to BaB2.
VaB2	In the "heavy till" area it remains as VaB2. In the "light till" area it goes to CsB2.
WsB2	In the "heavy till" area it goes to MoB2. In the "light till" area it goes to MuB3.

SCS-SOILS-37A
3-75

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

U S DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Soil Survey Area: Benton County
State: Indiana

Date: 6/84

CULTURAL FEATURES

BOUNDARIES

state

County

Minor civil division

Field sheet matchline & neatline

AD HOC BOUNDARY (label)

Small airport, airfield, park, oilfield, cemetery, or flood pool

STATE COORDINATE TICK
1 390 000 FEET

LAND DIVISION CORNERS (sections and land grants)

ROADS

Divided (median shown if scale permits)

County, farm or ranch

ROAD EMBLEMS & DESIGNATIONS

Federal 287

State 52

RAILROAD

DAMS

Medium or small

PITS

Gravel pit

CULTURAL FEATURES (cont.)

MISCELLANEOUS CULTURAL FEATURES

Farmstead, house (omit in urban areas)

Church

School

WATER FEATURES

DRAINAGE

Perennial, single line

Intermittent

Drainage end

Canals or ditches

Drainage and/or irrigation

LAKES, PONDS AND RESERVOIRS

Perennial water w

MISCELLANEOUS WATER FEATURES

Marsh or swamp

Wet spot

Wet spot symbols (⩛) which are circled in red will be correlated as ⓘ poorly or very poorly drained soil in potholes within very poorly, poorly and somewhat poorly drained map units

SPECIAL SYMBOLS FOR SOIL SURVEY

SOIL DELINEATIONS AND SOIL SYMBOLS

CeA FoB2

SHORT STEEP SLOPE

GULLY

MISCELLANEOUS

Gravelly spot

Dumps and other similar non soil areas

Sandy spot

Poorly or very poorly drained soil in potholes within very poorly, poorly and somewhat poorly drained map units ⓘ

Very severely eroded spot #

PRIME FARMLAND

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Soil name
AnA	Andres silt loam, 0 to 2 percent slopes (where drained)
AnB	Andres silt loam, 2 to 4 percent slopes (where drained)
As	Ashkum silty clay loam (where drained)
AyB2	Ayr Variant fine sandy loam, 2 to 6 percent slopes, eroded
BaB2	Barce loam, 2 to 6 percent slopes, eroded
BbA	Barce silt loam, 0 to 2 percent slopes
BdB2	Billett sandy loam, 2 to 6 percent slopes, eroded
Bt	Bryce silty clay (where drained)
Ch	Chalmers silty clay loam (where drained)
Ck	Comfrey silty clay loam, sandy substratum, occasionally flooded (where drained)
Cm	Comfrey silty clay loam, sandy substratum, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
CpA	Conover silt loam, 0 to 3 percent slopes (where drained)
CsA	Corwin silt loam, 0 to 2 percent slopes
CsB2	Corwin silt loam, 2 to 6 percent slopes, eroded
Ct	Crane silt loam (where drained)
Cu	Crane loam, till substratum (where drained)
Do	Darroch silt loam (where drained)
Dp	Darroch silt loam, till substratum (where drained)
Dr	Darroch silt loam, moderately fine substratum (where drained)
Du	Drummer silty clay loam (where drained)
Dv	Drummer silty clay loam, gravelly substratum (where drained)
Dx	Drummer silty clay loam, stratified sandy substratum (where drained)
ElA	Elliott silt loam, 0 to 2 percent slopes (where drained
ElB2	Elliott silt loam, 2 to 4 percent slopes, eroded (where drained)
FoB2	Foresman silt loam, 1 to 5 percent slopes, eroded
FpB2	Foresman silt loam, till substratum, 1 to 5 percent slopes, eroded

PRIME FARMLAND--Continued

Map symbol	Soil name
FrB2	Foresman loam, moderately fine substratum, 1 to 5 percent slopes, eroded
Ft	Free clay loam (where drained)
GlA	Gilboa silt loam, 0 to 2 percent slopes (where drained)
GlB	Gilboa silt loam, 2 to 4 percent slopes (where drained)
LsA	Lisbon silt loam, 0 to 2 percent slopes (where drained)
MbB2	Markham silt loam, 2 to 6 percent slopes, eroded
MlB2	Miami silt loam, 2 to 6 percent slopes, eroded
MxB2	Montmorenci silt loam, 2 to 6 percent slopes, eroded
OlA	Odell silt loam, 0 to 2 percent slopes (where drained)
OlB2	Odell silt loam, 2 to 4 percent slopes, eroded (where drained)
RuA	Rush silt loam, 0 to 2 percent slopes
RuB2	Rush silt loam, 2 to 6 percent slopes, eroded
Sd	Seafield fine sandy loam (where drained)
Sh	Selma silty clay loam, till substratum (where drained)
Sk	Selma silty clay loam, moderately fine substratum (where drained)
SxA	Swygert silty clay loam, 0 to 2 percent slopes (where drained)
SxB2	Swygert silty clay loam, 2 to 6 percent slopes, eroded (where drained)
TlA	Tippecanoe silt loam, 0 to 2 percent slopes
TlB	Tippecanoe silt loam, 2 to 4 percent slopes
VaB2	Varna silt loam, 1 to 5 percent slopes, eroded
Wa	Wallkill Variant silty clay loam (where drained)
WhA	Wea silt loam, 0 to 2 percent slopes
WhB2	Wea silt loam, 2 to 6 percent slopes, eroded
WoA	Whitaker silt loam, 0 to 3 percent slopes (where drained)
Wt	Wolcott loam (where drained)

Approved: April 3, 1985

Rodney F. Harner

RODNEY F. HARNER
Head, Soils Staff
Midwest NTC

CONVERSION LEGEND FOR BENTON COUNTY, INDIANA

Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol	Field symbol	Publication symbol
AkA	Sd	FpA	Dp	Pf	Pn	WhC2	BeC2
AnA	AnA	FpB	FpB2	Pk	Dx	Wm	Ft
AnB	AnB	FpB2	FpB2	Pm	Sh	Wn	Sh
AnB2	AnB	FrB2	FrB2	Pn	Pn	WoA	WoA
As	As	GlA	GlA	PrB	FoB2	WoB	WoA
AyA	AyB2	GlB	GlB	Pt	Pt	WoB2	WoA
AyB	AyB2	GlB2	GlB	RbA	Dp	WsB2	MuB3
AyB2	AyB2	Ho	Ho	RbB	Dp	WsB3	MuB3
BaA	BbA	JaC2	BeC2	RbB2	Dp	Wt	Wt
BaB	BaB2	LsA	LsA	Rd	Sh		
		MoB2	MxB2				
BaB2	BaB2	MbB2	MbB2	RsB	MlB2		
BaC2	BaC2	MlB2	MlB2	RsB2	MlB2		
BmA	BmA	MlD2	MlD2	RsC	MmC3		
BnA	Do	MmB2	MlB2	RsC2	MmC3		
Bt	Bt	MmC2	MmC3	SbB2	CsB2		
Ch	Ch	MmC3	MmC3	Sd	Sd		
ClB2	SxB2	MmD2	MlD2	Sg	Sh		
Cn	Cm	MmD3	MlD2	Sh	Sh		
Co	Ck	Mn	Du	Sk	Sk		
CpA	CpA	Mo	Ch	Sn	Ct		
CpB	CpA	Mp	Dv	So	Cm		
CpB2	CpA	MrA	SxA	SxA	SxA		
CsA	CsA	MuA	MxB2	SxB2	SxB2		
CsB	CsB2	MuB	MxB2	SyA	BbA		
CsB2	CsB2	MuB2	MxB2	SyB	BaB2		
CsC2	CsC2	MxA	Do	SyB2	BaB2		
Ct	Ct	OcA	RuA	SyC2	BaC2		
Cu	Cu	OcB2	RuB2	ThA	TlA		
DnB	CsB2	OcC2	BeC2	TlA	TlA		
DnB2	CsB2	OdC2	CsC2	TlB	TlB		
Do	Do	OlA	OlA	TlB2	TlB		
Dp	Dp	OlB	OlB2	TmA	FpB2		
Dr	Dr	OlB2	OlB2	TmB	FoB2		
Ed	Ho	OnA	BdB2	VaB2	VaB2		
ElA	ElA	OnB	BdB2	Wa	Wa		
ElB	ElB2	OnB2	BdB2	Wb	Wb		
ElB2	ElB2	OnC	BeC2	We	Pn		
FoA	Do	OnC2	BeC2	WhA	WhA		
FoB	FoB2	Pa	Ho	WhB	WhB2		
FoB2	FoB2	PdC2	CsC2	WhB2	WhB2		

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS

1. Laboratory Data from NSSL with SCS-SOI-8 Forms.

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Milford	S81IN-007-004	Du	Chalmers
Milford	S81IN-007-002	Ch	Chalmers
Milford	S81IN-007-001	Ch	Chalmers
Milford	S81IN-007-009	Ch	Chalmers taxadjunct (fine)
Milford	S83IN-007-003	Du	1/ Drummer
Milford	S81IN-007-003	Dv	Drummer
Milford	S83IN-007-001	Du	Drummer
Westland Variant	S83IN-007-020	Ft	2/ Free
Andres Variant	S83IN-007-010	G1A	2/ Gilboa
Milford	S81IN-007-010	Du	Kokomo
Milford	S81IN-007-005	Ch	Milford
Milford	S81IN-007-006	Ch	Milford
Milford	S81IN-007-011	Sh	Selma
Milford	S81IN-007-007	Ch	Wolcott
Milford	S81IN-007-008	Ch	Wolcott

2. Laboratory data from Purdue University with SCS-SOI-8 Forms

Andres	S80IN7-59	AnA	Andres taxadjunct (fine)
Ayr Variant	S81IN7-26	AyB2	1/ Ayr Variant
Symerton	S80IN7-37	BbA	2/ Barce
Onarga	S80IN7-60	BdB2	Billett taxadjunct (f-1/s or s-sk)
Jasper	S81IN7-25	BeC2	Billett taxadjunct (fine-loamy)
Brems	S81IN7-30	BmA	1/ Brems Variant
Bryce	S80IN7-47	Bt	1/ Bryce
Milford	S80IN7-33	Ch	1/ Chalmers
Comfrey	S80IN7-31	Ck	1/ Comfrey
Comfrey	S79IN7-5	Cm	Comfrey taxadjunct (coarse-loamy)
Conover	S81IN7-28	CpA	1/ Conover
Corwin	S80IN7-11	CsB2	1/ Corwin
Corwin	S80IN7-13	CsC2	Corwin
Dana	S79IN7-1	CsB2	Corwin taxadjunct (Hapludoll)
Crane	S80IN7-42	Ct	2/ Crane
Darroch	S80IN7-19	Do	2/ Darroch
Darroch	S80IN7-34	Dp	Darroch

1/ Typical pedon.
2/ Type location.

Sampled as	Pedon Sample No.	Publication Symbol	Approved Series Name or Classification
Pella	S79IN7-2	Dx	Drummer
Lisbon	S80IN7-39	LsA	Elliott
Foresman	S80IN7-32	FpB2	Foresman
Westland	S80IN7-43	Ft	Free
Selma	S80IN7-29	Sh	Mahalasville
Miami	S81IN7-27	M1B2	1/ Miami
Milford	S80IN7-23	Du	Milford
Montmorenci	S80IN7-44	MxB2	Montmorenci
Peotone	S80IN7-21	Pn	Peotone
Foresman	S80IN7-18	FoB2	Proctor thin solum
Ockley	S81IN7-12	RuB2	1/ Rush
Seafield	S81IN7-31	Sd	1/ Seafield taxadjunct (fine-loamy)
Westland	S80IN7-20	Sh	Selma till substration
Swygert	S80IN7-46	SxA	1/ Swygert
Swygert	S80IN7-45	SxB2	Swygert
Odell	S80IN7-15	E1B2	Swygert
Tippecanoe	S80IN7-41	T1A	Tippecanoe taxadjunct (Hapludoll)
Wallkill Variant	S80IN7-36	Wa	1/ Wallkill Variant
Warners Variant	S81IN7-24	Wb	1/ Warners Variant
Wea	S80IN7-40	WhA	1/ Wea
Whitaker	S81IN7-29	WoA	1/ Whitaker
Wolcott	S80IN7-22	Wt	1/ Wolcott

Notes to Accompany
Classification and Correlation
of the Soils of
Benton County, Indiana
by

William D. Hosteter
and
Steve R. Base

ASHKUM SERIES
This soil is thought to have clay films in the B horizon but does not have the 1.2 clay increase.

AYR VARIANT
This is a fine-loamy, mixed, mesic Typic Argiudoll. It is a variant because it has a water table.

BARCE SERIES
This soil is established by this correlation. It is formed in up to 20 inches of silty material, in loamy outwash, and the underlying loam glacial till which contains less than 22 percent clay.

BREMS VARIANT
This is a sandy, mixed, mesic Dystric Eutrochrept. It differs from Brems in having textures finer than loamy fine sand below a depth of 10 inches.

CHALMERS SERIES
This soil contains more clay in the upper part of the solum than defined for the series.

COMFREY SERIES
This soil is considered to have a B horizon.

CORWIN SERIES
The C horizon has a yellower hue than defined for the series.

FREE SERIES
This soil is established by this correlation. It is formed in loamy and gravelly outwash under prairie vegetation.

GILBOA SERIES
This soil is established by this correlation. It has formed in up to 20 inches of silty material, loamy outwash, and the underlying loam glacial till which contains less than 22 percent clay.

PEOTONE SERIES
Part of the C horizon has a higher chroma than defined for the series. This soil is classified as montmorillonitic. However, it may be mixed but there isn't any lab data available.

SEAFIELD SERIES
This soil is a taxadjunct. It contains more clay in the control section than defined for the series. It is a fine-loamy, mixed, mesic Udollic Ochraqualf.

WALLKILL VARIANT
The mineral overwash is darker colored and finer textured than the Wallkill series. It is a fine, mixed, nonacid, mesic Thapto-Histic Fluvaquent.

WARNERS VARIANT
This soil differs from the Warners series in having more clay in the upper part of the control section and is not carbonatic. It is a fine-silty mixed mesic Fluvaquentic Haplaquoll.

CLASSIFICATION OF THE SOILS

(An asterisk in the first column indicates a taxadjunct to the series. See notes for a description of those characteristics of this taxadjunct that are outside the range of the series)

Soil name	Family or higher taxonomic class
Andres	Fine-loamy, mixed, mesic Aquic Argiudolls
Ashkum	Fine, mixed, mesic Typic Haplaquolls
Ayr Variant	Fine-loamy, mixed, mesic Typic Argiudolls
Barce	Fine-loamy, mixed, mesic Typic Argiudolls
Billett	Coarse-loamy, mixed, mesic Mollic Hapludalfs
Brems Variant	Sandy, mixed, mesic Dystric Eutrochrepts
Bryce	Fine, mixed, mesic Typic Haplaquolls
Chalmers	Fine-silty, mixed, mesic Typic Haplaquolls
Comfrey	Fine-loamy, mixed, mesic Cumulic Haplaquolls
Conover	Fine-loamy, mixed, mesic Udollic Ochraqualfs
Corwin	Fine-loamy, mixed, mesic Typic Argiudolls
Crane	Fine-loamy, mixed, mesic Aquic Argiudolls
Darroch	Fine-loamy, mixed, mesic Aquic Argiudolls
Drummer	Fine-silty, mixed, mesic Typic Haplaquolls
Elliott	Fine, illitic, mesic Aquic Argiudolls
Foresman	Fine-loamy, mixed, mesic Typic Argiudolls
Free	Fine-loamy, mixed, mesic Typic Haplaquolls
Gilboa	Fine-loamy, mixed, mesic Aquic Argiudolls
Houghton	Euic, mesic Typic Medisaprists
Lisbon	Fine-silty, mixed, mesic Aquic Argiudolls
Markham	Fine, illitic, mesic Mollic Hapludalfs
Miami	Fine-loamy, mixed, mesic Typic Hapludalfs
Montmorenci	Fine-loamy, mixed, mesic Aquollic Hapludalfs
Odell	Fine-loamy, mixed, mesic Aquic Argiudolls
Peotone	Fine, montmorillonitic, mesic Cumulic Haplaquolls
Rush	Fine-silty, mixed, mesic Typic Hapludalfs
*Seafield	Coarse-loamy, mixed, mesic Udollic Ochraqualfs
Selma	Fine-loamy, mixed, mesic Typic Haplaquolls
Swygert	Fine, mixed, mesic Aquic Argiudolls
Tippecanoe	Fine-loamy, mixed, mesic Typic Argiudolls
Varna	Fine, illitic, mesic Typic Argiudolls
Wallkill Variant.	Fine, mixed, nonacid, mesic Thapto-Histic Fluvaquents
Warners Variant.	Fine-silty, mixed, mesic Fluvaquentic Haplaquolls
Wea	Fine-loamy, mixed, mesic Typic Argiudolls

CLASSIFICATION OF THE SOILS--Continued

Soil name	Family or higher taxonomic class
Whitaker	Fine-loamy, mixed, mesic Aeric Ochraqualfs
Wolcott	Fine-loamy, mixed, mesic Typic Haplaquolls